

AUGUST, 1944

BUSINESS CONDITIONS

A REVIEW BY THE FEDERAL RESERVE BANK OF CHICAGO

War Loan Raises 20 Billion Dollars

Seventh District States Exceed Quotas

Fifth War Loan sales of Government securities to non-bank investors reached 20 billion 639 million dollars, with sales to individuals totaling 6 billion 351 million dollars, and to corporations and associations 14 billion 288 million dollars. These figures exceed by far the results of any other drive, comparing with 16.7 billion dollars in the Fourth, 18.3 billion dollars in the Third, 13.1 billion dollars in the Second, and 7.6 billion dollars in the First Drives. The over-all goal of 16 billion dollars was exceeded by 29 per cent, the 6 billion dollar individual goal by 6 per cent, and the 10 billion dollar goal for corporations and associations by 43 per cent.

Combined sales to nonbank investors in the five states lying wholly or partly in the Seventh District exceeded the quota by a somewhat higher percentage than in the nation, reaching 3 billion 208 million dollars, or 133 per cent of the 2 billion 414 million dollar quota. This was about 20 per cent greater than sales of 2 billion 652 million dollars reached in the Fourth War Loan. Each of the five states exceeded its over-all quota, as well as the quota for corporations and associations. With the exception of Wisconsin, all of the states exceeded their quotas for sales to individuals—Iowa being particularly outstanding with sales to individuals reaching 138 per cent of the quota. The quota for sales of Series E bonds was met in all states, with Iowa again standing out.

BANK CREDIT EXPANSION LARGE

In interpreting the results of the Fifth War Loan consideration should be given to the very large bank purchases of securities in the market during the drive. In the period from May 31 to July 26 Government security holdings of the commercial and Federal Reserve banks expanded by 9 to 10 billion dollars, according to our estimate. The increase for weekly reporting banks in 101 cities alone amounted to 5 billion 431 million dollars. The estimate, which is subject to margin of error, is based on the change over this period in the Government security holdings of the weekly reporting banks in 100 cities outside New York. However, past estimates made in a similar manner have turned out to be fairly accurate when checked against the later Treasury survey of ownership of Government securities. The estimate indicates that Government security holdings of the banking system have probably increased by a larger amount than in any previous drive, with the possible exception of the Second War Loan in April and May 1943, during which the banking system acquired approximately 9 billion dollars of Government securities. Moreover, loans of weekly reporting banks in 101 cities to brokers, dealers, and others for purchasing or carrying Government securities

ESTIMATED INCREASE IN HOLDINGS OF U. S. GOVERNMENT SECURITIES
(amounts in billions of dollars)

Period	Total Interest-Bearing Debt		Commercial and Federal Reserve Banks		Others	
	Amt.	Per cent of total	Amt.	Per cent of total	Amt.	Per cent of total
1942 — 1st half	12.7	100.0	5.0	39.3	7.7	60.7
— 2nd half	35.1	100.0	18.5	52.8	16.6	47.2
1943 — 1st half	27.9	100.0	12.1	43.4	15.8	56.6
— 2nd half	29.3	100.0	11.7	40.1	17.5	59.9
1944 — 1st half ¹	30.0	100.0	11.9	39.6	18.1	60.4

¹Preliminary estimate through June 28 by Federal Reserve Bank of Chicago. Source: *Federal Reserve Bulletin*, July 1944, p. 704.

showed a net increase of 1 billion 297 million dollars between May 31 and July 26, adding further to the total expansion of bank credit during this two-month period.

The bulk of the Government securities acquired by the banking system during the drive were purchased in the market. Our estimates indicate that such market purchases exceeded 7 billion dollars. It is these large purchases in the market which have made possible the very large total sales realized in this drive. Purchases of securities in the market by banks, or extension of bank loans, are made by crediting the accounts of individuals and firms selling the securities or incurring the indebtedness. This makes new funds available to nonbank investors which can then be used to purchase new issues offered by the Treasury without drawing on previously accumulated deposits. Consequently, if it had not been for these bank purchases in the market, total sales to nonbank investors in the drive would have been only about 13 billion dollars. In coming months, as the Treasury spends the funds supplied by bank purchases of Government securities in the market, cash holdings of business firms and individuals will rise to further heights, thereby adding to the already large inflation potential.

Two factors account for the large bank purchases of securities in the market during the Fifth War Loan. One is the fact that the 1¼ per cent notes and 2 per cent bonds offered were very attractive to the banks. Consequently, non-bank investors could anticipate a profit by acquiring those securities at par during the drive and reselling to banks at a premium. This was undoubtedly an important factor rais-

(Continued on Back Cover)

Record Growth In Industrial Facilities

Government Finances 80 Per Cent of New District Plants

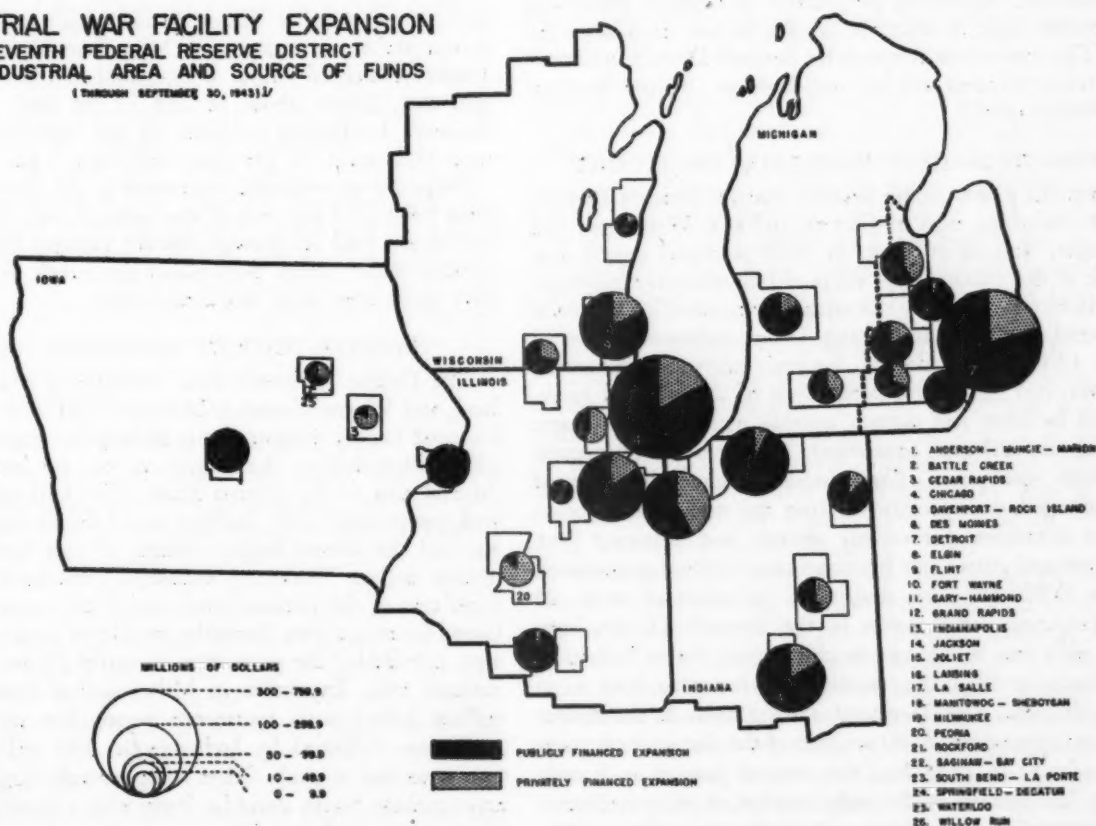
New and enlarged industrial facilities for war purposes in the Seventh Federal Reserve District since 1940 have exceeded 4 billion dollars in value, the largest amount among all Federal Reserve Districts, which have had a combined expansion of 19 billion dollars, and equivalent to about one-third of the estimated value of industrial facilities existing in the district before war preparations began.

With aggregate financing of these plants and equipment, 80 per cent public and 20 per cent private, the Federal Government now has at wartime values an interest of more than three billion dollars in Midwest industry. Expenditures for industrial war facilities have been roughly two-thirds for equipment and one-third for structures, reflecting the extent

of industrial plant conversion to war use in this area and the importance of prewar manufacturing establishments.

The progress of the industrial war effort in the district portions of Illinois, Indiana, Iowa, Michigan, and Wisconsin is indicated in the timing of completion and installation of the new facilities. More than 85 per cent of the district's new war plants and equipment have been put into use since January 1, 1943, as compared with 45 per cent in the nation during the same period. This comparatively later industrial growth in the Midwest is attributable both to the size of prewar facilities which were converted to war use and to the early emphasis in the national war effort upon shipbuilding and aircraft assembly largely outside the district. Present

INDUSTRIAL WAR FACILITY EXPANSION SEVENTH FEDERAL RESERVE DISTRICT BY INDUSTRIAL AREA AND SOURCE OF FUNDS (THROUGH SEPTEMBER 30, 1943)¹



¹Facility contracts were awarded from June 1940 through September 1943, but actual construction and installation in many cases have occurred since September 1943.

Total industrial war facility expansion in Seventh District industrial areas equalled 3,280 million dollars, 81 per cent publicly financed.

Detroit industrial area — 779 million dollars, first in nation.

Chicago industrial area — 724 million dollars, second in nation.

industrial output in the Seventh District is to a very significant extent the result of planning after battlefield experience. Production records reflect heavy supply contract awards during the past year and the coming into production of new industrial facilities in recent months. Some important plant expansions, moreover, remain to be finished.

Construction of new plants and the installation of new equipment in the Seventh Federal Reserve District during the war have been predominantly for the production of aircraft and parts and ordnance and accessory materials. These two product groups account for 2.2 billion dollars or over one-half of all Seventh District industrial facility expansion through March 1944. More than 22 billion dollars, or 62 per cent, of the district's supply contracts similarly have been authorized for these two major groups of war products. Within the ordnance group ammunition, tanks, and heavy guns are most important.

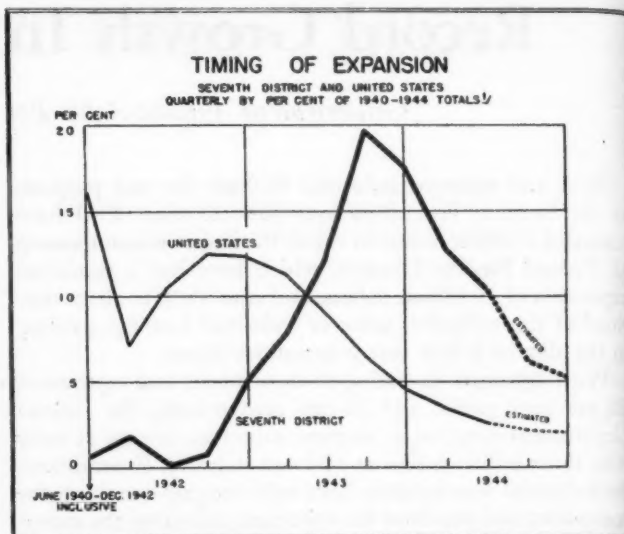
Industrial expansion during the war has temporarily at least increased the already recognized importance of manufacturing in the area. The nature and extent of this industrial expansion during the last four years unquestionably will have far-reaching effects upon the postwar economy of the Midwest, depending particularly on whether plants and equipment built in wartime can be, or are, used after the war. The conversion prospects for Seventh District industries and industrial areas will be considered in a future *Business Conditions* article.

SEVENTH DISTRICT INDUSTRIAL IMPORTANCE

Industrial plants in the Seventh Federal Reserve District, which comprises most of Illinois, Indiana, Wisconsin, and Michigan, and all of Iowa, in 1939 produced nearly one-fourth of the nation's total value of manufactured products. The district had roughly the same proportion of total prewar industrial facilities, amounting to an estimated value of about 12-14 billion dollars. Several individual industries, however, had far greater proportions of the national totals, both in facilities and output, notably motor vehicles, meat packing, agricultural equipment, machinery, refrigerators, and radio equipment. These industries have all converted and enlarged their facilities during the war. Several other district industries, particularly aircraft and ordnance (ammunition and guns) also have assumed national importance.

The WPB has now designated as industrial areas 26 manufacturing communities in the Seventh District compared with four recognized by the United States Bureau of the Census in 1939; the national total has risen from 33 to 113 such areas. The 26 manufacturing areas in the district produced approximately 90 per cent of the district total value of products in 1939, and the current proportion is only slightly less because of the early location of many ordnance and chemical-powder plants outside the areas for security reasons. Also, nearly 85 per cent of the district's facility expansion has been in these 26 areas.

The district's largest peacetime industrial states have continued to be the most important centers of wartime manufactures. Michigan and Illinois have had the overwhelming



¹Facility contracts were awarded from June 1940 through September 1943, but actual construction and installation in many cases have occurred since September 1943.

bulk, 70 per cent, of the expansion which has taken place in new plants and equipment. More than 70 per cent of the district's industrial output is estimated to come from Michigan and Illinois, about 38 and 33 per cent, respectively. Indiana's production is about 16 per cent of the district total; Wisconsin, 10 per cent; and Iowa, 3 per cent.

Despite unprecedented expansion in the Seventh District since 1940, 23.3 per cent of the national total, the Midwest has barely held its prewar relative position because other sections of the nation, particularly the South and Far West, have made even more spectacular gains.

SEVENTH DISTRICT INDUSTRIAL AREAS

The Detroit industrial area, comprising Macomb, Oakland, and Wayne Counties, Michigan, has received publicly financed facility authorizations during the war in excess of 680 million dollars, the largest amount for any single industrial area in the United States. The Chicago industrial area, comprising Cook, DuPage, and Lake Counties, Illinois, has had the second largest volume of new facilities—626 million dollars. These two industrial areas have had nearly 8 per cent of the national total, and if the expansion in the Gary-Hammond area, formerly considered a part of Chicago area, is included the proportion is nearly 10 per cent of the national total. Expansion in Milwaukee of more than 225 million dollars ranks fourteenth among the nation's industrial areas, followed by Indianapolis, 148 million dollars, twenty-second in rank. Other comparatively large industrial areas include South Bend-La Porte with a national ranking of twenty-sixth; Joliet, Illinois, twenty-seventh; Springfield-Decatur, Illinois, thirty-second; Willow Run, Michigan, thirty-fifth; and Des Moines, Iowa, forty-fifth. Two-thirds of the district's new facilities are in use in the five largest areas, Detroit, Chicago, Milwaukee, Gary-Hammond, and Indianapolis.

The overwhelming importance of aircraft production in the Midwest is emphasized by the fact that expansion for aircraft facilities ranks first in Detroit and Chicago, the nation's leading industrial areas, as well as in nine other Seventh District areas. Expansion in ordnance facilities predominates in nine areas.

TIMING OF FACILITY COMPLETIONS

Although general conversion of Seventh District plants and equipment did not get fully underway until after Pearl Harbor because of existing unutilized productive capacity, conversion was very extensive in 1942, probably as far-reaching as anywhere in the nation. Very few new facilities were completed by the close of 1942, the expansion at that time amounting to less than eight per cent of the district's present total compared with nearly 60 per cent completed for the nation.

The peak in new facility installations in the nation was reached in the third quarter of 1942 while in the Seventh District it was a year later. Ninety per cent of the nation's scheduled expansion was in place by the beginning of 1944, while the district lagged with only 63 per cent. As the tempo of industrial facility expansion has slowed down in the nation as a whole, the Seventh District has gradually caught up in facility completions so that at the close of the third quarter of 1944 the district will have completed more than 90 per cent of its planned industrial expansion, compared with over 95 per cent in use nationally.

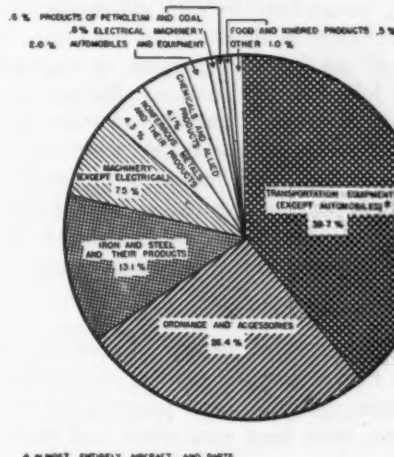
Although the availability of manpower in the Midwest made the district a logical place for industrial war construction, before many of the new plants were completed large numbers of potential workers had migrated elsewhere to take advantage of attractive employment opportunities. As the new facilities have come into production, manpower supplies have become increasingly scarce, causing the Seventh District currently to have the most acute labor shortage situation in the nation.

SHIFTS IN INDUSTRIAL EMPHASIS

Since the beginning of the defense period Seventh District industries not only have experienced increased productive activity but also have had numerous shifts in product makeup. The most striking gain in both products and facilities has been in aircraft and parts, to a marked degree at the expense of civilian automobile manufacture. Ordnance items have grown from virtually nothing in 1939 to second rank among all industry groups during the war. Chemicals and nonferrous metals, of small prewar importance, similarly have made unprecedented gains during the past four years. In contrast, several Seventh District industry groups allied closely to civilian needs have declined at least relatively, e.g., furniture; stone, clay, and glass; and printing and publishing.

Industrial facility expansion in the Seventh District during the war has been heavily concentrated in a few large industries. At the end of September 1943 the principal facility growth was in aircraft and parts, 1,273 million dollars or 39 per cent; ordnance, 865 million dollars or 26 per

WAR FACILITY EXPANSION BY INDUSTRY SEVENTH DISTRICT INDUSTRIAL AREAS COMBINED JUNE 1940 THROUGH SEPTEMBER 1943¹



¹ ALMOST ENTIRELY AIRCRAFT AND PARTS

¹ Facility contracts were awarded from June 1940 through September 1943, but actual construction and installation in many cases have occurred since September 1943.

cent; and iron and steel, 430 million dollars or 13 per cent. Nonelectrical machinery accounts for an additional 250 million dollars, or 8 per cent and chemicals and nonferrous metals, each about 135 million or 4 per cent. The district's leading peacetime industry, automobiles and equipment, had only 65 million dollars, or 2 per cent of the total, in new facilities to produce motor vehicles, but automotive firms dominate the expansion in district aircraft facilities.

LOCATION OF INDUSTRIAL GROWTH

While construction and installation of new aircraft facilities have taken place in 21 of the district's 26 industrial areas since 1940, the Detroit and Chicago areas account for 55 per cent of the expansion. Other key aircraft production centers in the district, each with more than five per cent of the total are: Indianapolis, Milwaukee, Willow Run, and South Bend-LaPorte.

Ordnance facility expansion has occurred in all Seventh District industrial areas, but is centered again in Detroit, 23 per cent, and Chicago, 11 per cent. Other areas with more than five per cent of the district total are: Springfield-Decatur, Milwaukee, Des Moines, South Bend-LaPorte, Flint, and Joliet. In addition to the ordnance facilities built in the industrial areas, very large plants making explosives and related items have been constructed in Sauk County, Wisconsin, and Vigo and Vermillion Counties, Indiana.

New plants to produce iron and steel and their products are centered largely in Gary-Hammond, 41 per cent, and Chicago, 35 per cent. More than 85 per cent of the wartime growth in facilities for making nonelectrical machinery has occurred in Detroit, Milwaukee, Chicago, and Rockford.

Within the district industrial areas 78 per cent of the new plants and equipment for nonferrous metals are located in Chicago, Saginaw-Bay City, and Gary-Hammond. New nonferrous metals facilities outside the recognized industrial areas, particularly in rural Michigan, however, are nearly as important as those within the areas. Ninety-three per cent of the facility expansion in chemicals has taken place in Joliet, Gary-Hammond, Detroit, and Chicago, but here again several important powder plants are situated outside the district's industrial areas.

Indicative of the large scale industrial expansion in the district, about 93 per cent of the total volume of new facilities has been in amounts of one million dollars or more. In 18 areas this proportion exceeded 90 per cent.

TYPE OF EXPANSION

Important in the over-all picture of Seventh District plant expansion, especially when postwar reconversion prospects are considered, are the general purposes for which facility expenditures have been authorized and made since June 1940. Almost 66 per cent of the dollar value of new war facilities in the district's 26 industrial areas has been for equipment, compared with 30 per cent for structures, and the remainder for other purposes.

Structure expenditures have been proportionately greatest in chemicals, lumber, leather, and printing, but the last two industry groups involve very limited expansion projects. In five other groups, representing well established peacetime industries, new plants have accounted for 25 per cent or less of total facility outlays: machinery, automobiles, products of coal and petroleum, rubber, and paper. The remaining industry groups, including aircraft, allied to the peacetime automobile manufacturers in the district, and ordnance, requiring complex and extensive plants, have followed a pattern of about 46 dollars in structure for every 100 dollars in equipment.

FINANCING INDUSTRIAL WAR FACILITIES

New industrial facilities constructed and installed since 1940 have been financed largely with public funds, more than 80 per cent in the Seventh District and about 70 per cent in the nation as a whole. A combination of factors has been responsible for this tremendous growth in public ownership of industrial plants and equipment, now approximately 3.4 billion dollars in the district and 15 billion throughout the United States. The urgency of the need for war materials did not allow time for many firms to plan and execute privately financed expansion programs, considering the specialized nature and size of the investment, uncertain postwar prospects, and the extent of immediately available financial resources. A large part of the needed facility expansion could be used only in wartime, and hence required Government financing. Moreover, the planned wartime expansion often has been too large for private firms to handle without some Government financial aid.

The Federal Government has financed new industrial war

plants and equipment both directly and by means of incentive programs to encourage use of private funds. The Defense Plant Corporation (DPC), a subsidiary of the Reconstruction Finance Corporation, has had the major role in publicly financed war facilities. By May 1944 DPC had financed 43 per cent of all Government financed plant and equipment expansion in the nation. The proportion of public funds advanced by the Army was 32 per cent; Navy, 20 per cent; Maritime Commission, 3 per cent; and other Government agencies, 2 per cent.

Under the Five-Year Amortization Plan, established by the Second Revenue Act of 1940, certain war plants financed by private business have been given the privilege of amortizing their capital expenditures over a period of five years for income tax purposes. By another plan, some private manufacturers are being reimbursed for construction by the War or Navy Department over a sixty-month period.

Over 85 per cent of total Government funds invested in Seventh District industries since 1940 have been for facilities to produce aircraft and parts, ordnance and accessories items, and iron and steel products. Almost 92 per cent of the facility expansion for aircraft and more than 90 per cent for ordnance in the Seventh District have been financed with public funds.

New plants and equipment have been financed from 58 to 75 per cent publicly in iron and steel, nonelectrical machinery, nonferrous metals, chemicals, and automobiles.

The district industries whose wartime growth in plant and equipment has been entirely privately financed include: food, rubber, furniture, leather, and printing and publishing. Other Seventh District industries which have been financed largely by private funds are electrical machinery; products of petroleum and coal; stone, clay, and glass products; and paper and allied products. In almost all instances, however, where private funds have been extensively used, the facility expansion has been quite small compared with expansion in industries heavily financed with public funds.

In seven of the district areas industrial facility expansion since 1940 has been financed over 90 per cent from public sources. These areas are: Davenport-Rock Island, Des Moines, Flint, La Salle, South Bend-LaPorte, Springfield-Decatur, and Willow Run. The combined public expenditures for plants and equipment in these areas are 514.7 million dollars.

In the largest industrial areas, the proportion of Government financing has been slightly smaller, but far greater dollar amounts are involved. Detroit industries have had more than 680 million dollars in public funds expended for new facilities, or about 80 per cent of total expansion. In Chicago 625 million has been spent or slightly more than 80 per cent of the total.

Private funds have exceeded public funds in wartime expenditures for facilities in only three of the district's 26 industrial areas; Cedar Rapids, 80 per cent; Elgin, 56 per cent; and Peoria, 86 per cent.

Feed Situation Eases

Smaller Supplies Offset by Livestock Liquidation

A reversal of the relationship between livestock numbers on farms and the available feed supplies has occurred in the past few months. This reversal has been brought about by substantial liquidation of some of the large inventories held on farms January 1 of this year and under growth during the first part of the current calendar year. Liquidation has occurred in hogs and poultry chiefly, with some in cattle, principally the surplus inventories from the ranges of the country. The new relationships are not the result of increased feed supplies having been produced or made available. On the contrary the expected stocks of feed grains and the anticipated production of the principal feed crops at the beginning of the feeding season this fall are expected

to be about five to eight per cent less than the supplies available last fall.

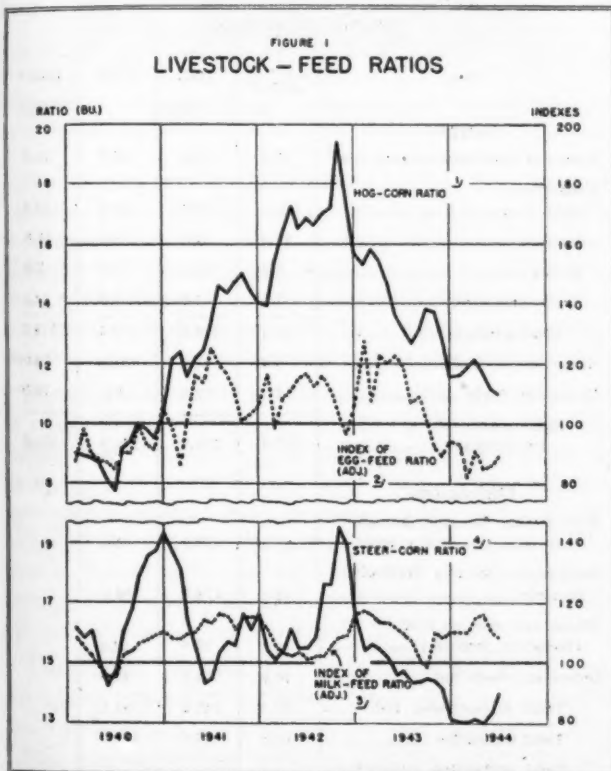
DECLINING PRICES LOWER PRICE RATIOS

The major motivation for the declining inventories of hogs and poultry may be found in the livestock-feed ratios in recent months. These ratios are the relationships between prices received by farmers for livestock and the prices received (or paid) for the feed grains normally fed to the respective species. As the ratios decline they show that the raising and feeding of the respective species become, in general, less profitable.

The hog-corn ratio (the price received by farmers for hogs per hundredweight divided by the price of corn) is expressed in bushels and may be roughly taken to mean that a hundredweight of hogs is equivalent in value to the farmer to the number of bushels of corn shown by the ratio. The United States hog-corn ratio, based on Chicago prices of hogs and corn, was at an average of nearly 17 bushels through 1942. Throughout most of 1943 the ratio was gradually declining. This decline has continued through 1944 and in July stood at 11.2 bushels compared with 12.7 for the same month of last year and 16.6 for July of 1942.

Similar changes have been shown by the egg-feed ratio. This ratio is calculated by dividing the average price per dozen eggs by the average cost per pound of a mixed grain poultry ration. Using United States farm prices in calculating the ratio, this measure averaged 19 pounds in 1942 and 1943, rising to 22 pounds last November. Shortly thereafter the ratio began to decline rapidly and this spring reached a level of less than 12 pounds. Some of this decline was due to the usual seasonal differences between such times of the year, but after allowing for such seasonal influences the level prevailing for the first part of this year was about 18 per cent below that for the average of 1943, and more than 25 per cent below the level of the corresponding part of 1943. The beef steer-corn ratio has shown some decline in recent months, but not to the extent indicated for the hog-corn and egg-feed ratios.

In contrast to these livestock-feed ratios the indicators for dairy feeding enterprises show greater firmness for recent months. The accompanying Figure 1 gives the available recent readings for the four more important livestock-feed ratios. It will be noted from the figure that the milk-feed ratio has shown much more stability in recent months. These ratios merely express changing relationships between livestock or livestock product prices on the one hand and the prices of feed on the other. In the case of the two enterprises (hogs and poultry) with rapidly or sharply reduced ratios the changes have been brought about



¹Number of bushels of corn required to buy 100 pounds of live hogs, based upon average monthly price of hogs and of No. 3 Yellow corn, both at Chicago.

²Index of ratio of average price per dozen eggs received by producers to the average cost per pound of poultry ration, adjusted to eliminate seasonal variation.

³Index of ratio of average price of wholesale milk to average price of grain mixture fed to milk cows for producing whole milk, adjusted to eliminate seasonal variation. Dairy production subsidy payments beginning October 1, 1943 included.

⁴Average price per 100 pounds of "Beef steers from the Corn Belt, sold out of first hands at Chicago for slaughter, all grades," divided by monthly average price of No. 3 Yellow corn per bushel at Chicago.

by declines in the prices of hogs and eggs. As a result of these less profitable relationships these two enterprises have been, as indicated above, under substantial liquidation.

SUBSTANTIAL LIQUIDATION OF HOGS AND POULTRY

The magnitude of the liquidation that has taken place in hogs and poultry during 1944 may be judged from a comparison of the marketings to date this year with those for the corresponding months of 1943. Receipts of hogs at the 12 principal markets of the nation totaled nearly 18 million head for the first six months of this year compared with less than 13 million for the corresponding months of 1943. Furthermore, the larger total marketings were not only the result of larger numbers on the farms; that is, they were not due exclusively to an expanded scale of production.

When the marketings are considered in terms of the numbers of hogs on farms January 1 of this year, it would appear that about 3½ million of the additional marketings represent liquidations—a reduction of the scale on which hogs are to be produced in the coming season. This is quite in keeping with the announced intentions of producers co-operating with the United States Department of Agriculture who indicated by the June 1 Pig Crop Survey that they intended to reduce their fall farrowings by one-third below the numbers they farrowed last fall.

Similar comparisons of the marketings of poultry during the first part of 1944 with the figures for 1943 indicate the extent of liquidation in poultry. Receipts of poultry for the first seven months at the four principal markets were 68 per cent larger than for the comparable period of 1943. Nearly all of this increase was liquidation of flocks, as evidenced by the fact that egg receipts at these markets were only equal in volume to those of the same period of 1943.

FEED SITUATION EASED

This liquidation of hogs and poultry has relieved considerably the tight feed situation which has prevailed in recent months. Stocks and production in sight for the current grain production season hold the promise of easing the feed stringency. The effects of the reduction in livestock numbers may be illustrated by the domestic disappearance of corn by quarters, as shown in Figure 2. Although these figures are for total domestic disappearance for all purposes, including wet- and dry-process products, alcoholic beverages, human food, seed, and other industrial uses, about 90 per cent of the disappearance is for livestock feed. The broken lines on the chart connecting corresponding quarters of the feeding seasons indicate the fact that, quarter by quarter, disappearance rose from the 1940-41 season in each quarter, including the first quarter of the 1943-44 season.

However, the second quarter of this season, the first quarter of calendar 1944, showed a slightly smaller disappearance than for 1943. This period was characterized by a growing tide of livestock liquidation. For the third quarter of the current season, the months of April, May, and June, the disappearance was about 13 per cent less than for the same period of last year. There will be probably even a greater decline in the disappearance for July and September.

It is expected that the number of grain-consuming animals on farms next January 1 will be about 10 per cent below the number as of the beginning of this year, when an all-time record livestock and poultry population was achieved. This obviously will have reduced the strain on feed supplies, and on reserves, which have been drawn upon heavily in the last two years. At the end of the present crop year it is expected that these reserves will be down to scarcely more than half the average for the five years prior to American entry into the war, although they have been frequently lower in the past. They will be about one-third less than at the start of the current crop year.

AVAILABLE FEED SUPPLIES TO BE SMALLER

With regard to feed supplies, current prospects are for a satisfactory production of the principal feed grains; corn, oats, barley, and grain sorghums. August 1 crop reports

**FEED BALANCE, UNITED STATES
YEAR BEGINNING OCTOBER**
(in millions of tons)

Item	Average 1937-41	1942	1943 ¹	1944 ²
Supply				
Stocks at beginning of crop year ³	17.1	18.8	16.7	12.0
Production:				
Corn	72.3	87.7	86.1	82.0
Oats	18.1	21.6	18.3	19.0
Barley	6.8	10.3	7.7	7.2
Grain sorghums	2.2	3.0	2.9	4.1
Total production	99.4	122.6	115.0	112.3
Other grains fed ⁴	4.6	15.8	14.7	14.0 ⁴
Byproduct feeds	16.5	19.5	19.9	19.0 ⁴
Total supply of concentrates	137.6	176.7	166.3	157.3
Utilization				
Feed grains for seed, human food, industry, and exports	12.1	13.1	13.4	
Feed grains for feed (including imports)	85.2	114.0	106.9	
Wheat and rye for feed (including imports)	4.4	18.5	12.6	
Byproduct feeds fed	16.5	19.5	19.9	
Total concentrates fed	106.1	147.0	138.4	
Total utilization	118.2	160.1	151.8	
Total utilization adjusted to crop year basis	117.5	160.0	154.3	
Stocks end of crop year ³	20.1	16.7	12.0	
	137.6	176.7	166.3	

¹Preliminary.

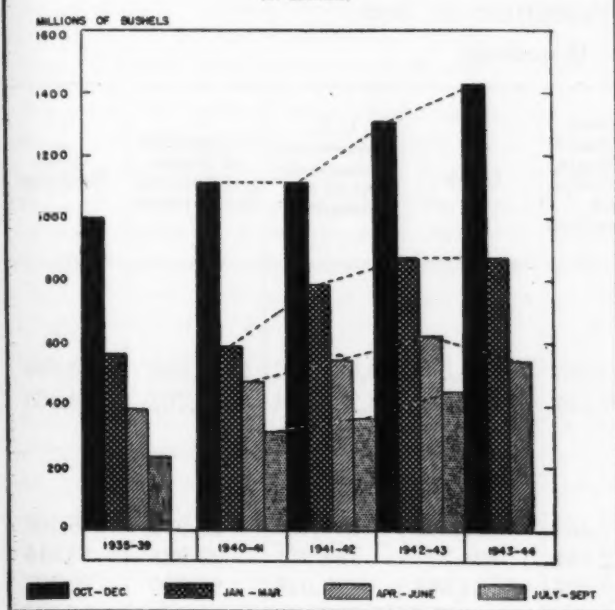
²Stocks of corn, October 1; oats, July 1; and barley, June 1; sorghum stocks not reported.

³Imported grain and domestic wheat and rye.

⁴Estimates by Federal Reserve Bank of Chicago.

Source: United States Department of Agriculture, except estimates as noted.

FIGURE 2
DOMESTIC CORN DISAPPEARANCE
(BY QUARTERS)



indicate a corn crop of 2.929 million bushels, from an acreage about 2 per cent above that of last year. Oats production is estimated at 1.188 million bushels. The expected yield of barley is 294 bushels and of grain sorghums, 147 million bushels. Combining these on the basis of weights to obtain tonnages of feed grains available for use indicates a production only about three per cent below that produced last year.

Byproduct feeds have tended to be a little more plentiful in recent months. Increased activity in the wheat-milling industry has been the biggest single contributing factor in increasing the supply of mill byproducts. Slight increases have come in soybean cake and meal supplies. Much greater easing of the situation has come from the increased supplies of linseed cake and meal. Animal proteins, such as tankage, meat scraps, fish meal, and milk products available for farm feeding, remain relatively unchanged.

The prospect for byproduct feeds per animal in the coming season appears to be much better than has prevailed this current season, although the absolute quantities may be a little less. Something depends upon the yields from soybeans, flax and cotton, but wheat-milling activity may be reasonably expected to continue at recent levels, yielding good supplies of wheat millfeeds.

Production of oilseed cake and meal is expected to be somewhat less for the 1944-45 season than for the current year. Slightly more soybean product will be available but this will be more than offset by smaller supplies of cottonseed and a reduction of nearly one-half in the acreage of flax being grown this year. Animal proteins will doubtless

be in slightly smaller supply as a result of reductions in tankage and meat scraps coming from smaller totals of livestock slaughter. With the demand for protein meals leveling off and the prospect of continued high protein production at or near recent high levels, the War Food Administration has recently been reported as giving consideration to the relaxation of limitations on the use of protein in mixed feeds in the near future.

The amount of wheat fed to livestock in the coming crop year will probably be less than the quantities fed during the past two years. The bumper crop of wheat would presumably provide ample stocks for feed if needed, but with the reductions in hogs and poultry and relatively eased supplies of coarse grains in prospect, less wheat feeding may be expected. In the two and one-half years ending June 30 the Commodity Credit Corporation sold 631 million bushels of wheat for feed. This is equal to a normal year's domestic consumption of wheat in peacetime, and was fed in addition to that normally fed on farms where grown.

DROUGHT LIMITS HAY AND PASTURES

Hay crops, including both tame and wild hay, appear from the August 1 crop report to offer a slightly smaller supply than was produced last year. Earlier crop reports indicated a production about equal to that of last year but extensive droughts during much of the midsummer damaged the hay crop to a considerable extent. Pastures were on the whole in good to excellent condition until drought began rather extensive damage, but are still reported to be good in the range states. Burned pastures in some areas have required earlier than usual use of this year's hay crops, and therefore have reduced the effective carrying capacity of hay for the balance of the season.

FEED "BALANCE" FOR COMING SEASON

On the basis of the expectations at present with regard to carry-over stocks, 1944 crop production of feed grains, and the estimates for other factors possible at this time, the feed balance for the United States is shown in the accompanying table.

In summary, the present feed prospect is that there will be for the coming season a total supply of grains and byproduct feeds estimated at about 157 million tons, or 5 per cent less than the supply of 166 million tons available for the season ending October 1 of this year. Meanwhile the requirements, in terms of animals to be fed, including livestock and poultry, will be about 10 per cent less, with the largest reductions in hogs and poultry. Cattle numbers will probably remain about the same as in the current season, with increase in dairy cattle about offset by the declines in other cattle. This leaves more feed available per "animal unit", and should permit a utilization of the feeds available on a more efficient basis than has prevailed in the past several months.

COMPARISON OF LOANS, INVESTMENTS, AND DEPOSITS
ALL MEMBER BANKS, SEVENTH FEDERAL RESERVE DISTRICT

JUNE 30, 1944 AND DECEMBER 31, 1943

(dollar amounts in thousands)

		Number of Banks	Demand Deposits of Individuals, Partnerships, and Corporations	Loans	U. S. Government Obligations, Direct and Guaranteed	Obligations of States and Political Subdivisions	Other Securities
CHICAGO CENTRAL RESERVE CITY BANKS							
	June 30, 1944	13	\$3,040,287	\$1,064,004	\$3,687,767	\$203,556	\$168,858
	Dec. 31, 1943	13	3,097,107	1,004,220	3,237,554	157,767	154,563
RESERVE CITY BANKS							
Illinois	June 30, 1944	40	547,450	125,850	606,182	28,956	18,465
	Dec. 31, 1943	40	512,061	124,277	488,911	25,921	18,316
Indiana	June 30, 1944	4	227,475	54,663	287,046	21,870	10,265
	Dec. 31, 1943	4	253,022	58,814	252,136	21,805	12,266
Iowa	June 30, 1944	10	121,025	52,338	226,646	28,225	5,288
	Dec. 31, 1943	11	120,346	52,522	177,933	26,730	6,013
Michigan	June 30, 1944	9	1,261,610	300,232	1,675,805	25,803	64,022
	Dec. 31, 1943	9	1,305,857	271,829	1,461,189	27,831	66,801
Wisconsin	June 30, 1944	6	334,174	90,835	527,628	7,720	11,146
	Dec. 31, 1943	7	361,912	83,527	446,544	8,891	10,730
Seventh District	June 30, 1944	69	2,491,734	623,918	3,323,257	112,574	109,186
	Dec. 31, 1943	71	2,553,198	590,969	2,826,713	111,178	114,126
COUNTRY BANKS							
Illinois	June 30, 1944	269	714,769	119,869	739,164	65,188	37,486
	Dec. 31, 1943	268	693,769	122,745	643,865	59,226	34,008
Indiana	June 30, 1944	164	439,043	106,971	496,652	33,940	23,471
	Dec. 31, 1943	165	442,319	103,482	438,431	33,154	22,477
Iowa	June 30, 1944	152	271,766	73,933	270,647	24,488	8,032
	Dec. 31, 1943	151	255,261	75,513	220,183	23,452	7,736
Michigan	June 30, 1944	178	418,992	156,910	616,396	75,252	29,035
	Dec. 31, 1943	177	432,944	153,518	528,071	73,331	26,315
Wisconsin	June 30, 1944	112	263,429	78,545	381,058	25,725	20,763
	Dec. 31, 1943	108	249,986	74,430	303,578	25,901	20,681
Seventh District	June 30, 1944	875	2,107,998	536,228	2,503,917	224,593	118,787
	Dec. 31, 1943	869	2,074,279	529,688	2,134,128	215,064	111,217
TOTAL — ALL MEMBER BANKS SEVENTH DISTRICT							
	June 30, 1944	957	\$7,640,019	\$2,224,150	\$9,514,941	\$540,723	\$396,831
	Dec. 31, 1943	953	7,724,584	2,124,877	8,198,395	484,009	379,906

WAR LOAN

(Continued from Inside Cover)

ing loans of weekly reporting member banks in 101 cities for purchasing or carrying Government securities to a peak of 2 billion 817 million dollars on July 12. These loans declined 797 million dollars during the three subsequent weeks.

However, the types of issues offered during the drive should not be overrated as a factor influencing the amount of bank credit expansion in each drive. Even in the Fourth War Loan, when the drive basket did not include similar securities eligible for bank investment, bank purchases in the market amounted to approximately 4 billion 500 million dollars. Moreover, the expansion of Government security holdings, other than Treasury bills, of weekly reporting banks in 101 cities during the present drive has been mainly in certificates rather than in notes and bonds. Certificates increased 2 billion 223 million dollars between May 31 and July 26, all representing purchases in the market. In contrast, note and bond holdings increased by only 409 million and 1 billion 270 million dollars, respectively. This indicates that bank purchases are influenced by the amount of securities offered for sale by nonbank investors as well as by the type of securities offered in the drive.

A second, and probably more significant, factor permitting and encouraging bank credit expansion during the drives is the extreme ease brought about in the reserve positions of member banks. Since war loan deposits are not subject to reserve requirements, transfer of deposits from private to war loan account as nonbankers purchase Government securities frees a substantial amount of member bank reserves. This creates a great inducement for banks to acquire securities in the market.

BANKS PURCHASE LESS OVER TIME

Although bank absorption of Government securities in June and July was probably greater than in any two-month period in our history, to get a proper perspective of the amount of inflationary expansion in the Government security holdings of the banking system it is necessary to consider longer periods of time. The table shows by six-month periods since the end of 1941 the increase in holdings of Government securities by the banking system, including both commercial and Federal Reserve banks, and by nonbank investors. The largest increase in Government security holdings of the banking system, both in absolute amount and relative to the amount taken by other investors, occurred in the second half of 1942. This was the period of greatest expansion in the war program and in the volume of output generally. Consequently, partly because of rapidly expanding needs for working cash balances, business firms and other nonbank investors did not supply as large a part of the funds needed by the Treasury as had subsequently been true. Since the end of 1942 absorption of Government securities by the banking system has been approximately 12 billion dollars every six months. Nonbank investors have been taking a somewhat larger amount in each successive period since the end of 1942, so that the proportion of the increase in the interest-bearing debt taken by the banking system has been declining somewhat.

In the four-week period from June 28 to July 26, the interest-bearing public debt, direct and guaranteed, increased approximately 8.9 billion dollars. Of this increase we estimate that about 3.8 billion, or somewhat less than 43 per cent, was absorbed by the banking system, and approximately 5.1 billion was absorbed by nonbank investors. On July 26 the interest-bearing public debt stood at approximately 208 billion dollars, of which almost 15 billion was held by the Federal Reserve Banks, about 72 billion by the commercial banks, and approximately 121 billion by other holders.

FIFTH WAR LOAN SALES AND QUOTAS STATES IN THE SEVENTH FEDERAL RESERVE DISTRICT

(amounts in millions of dollars*)

States	Grand Total			Individuals									Corporations and Associations		
				Total			Series E			Other Issues					
	Sales	Quota	Per Cent of Quota	Sales	Quota	Per Cent of Quota	Sales	Quota	Per Cent of Quota	Sales	Quota	Per Cent of Quota	Sales	Quota	Per Cent of Quota
Illinois.....	1,470	1,107	133	408	405	101	216	204	106	191	201	95	1,062	702	151
Indiana.....	367	281	131	146	133	110	80	75	107	66	58	114	221	148	149
Iowa.....	281	202	139	150	109	138	77	58	133	73	51	143	130	93	140
Michigan.....	678	526	129	277	276	100	169	169	100	107	107	100	401	250	161
Wisconsin.....	413	298	139	119	124	96	73	67	109	47	57	82	293	174	169
Five state total.....	3,208	2,414	133	1,100	1,047	105	615	573	107	484	474	102	2,108	1,367	133

*Amounts are rounded and will not necessarily add to totals.

SEVENTH FEDERAL



RESERVE DISTRICT

